



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,509	10/29/2001	Scott Hunt	56442 (71710)	5412

25561 7590 09/14/2004

JOHN W. RYAN  
C/O DECHERT LLP  
PRINCETON PIKE CORPORATION CENTER  
P.O. BOX 5218  
PRINCETON, NJ 08543-5218

EXAMINER

O CONNOR, CARY E

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/008,509	<b>Applicant(s)</b> HUNT ET AL	
	<b>Examiner</b> Cary E. O'Connor	<b>Art Unit</b> 3732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 5-16 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 9-16, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter et al (WO 01/50946) in view of Gannoe et al (2002/0077532). Carpenter shows a segmented arm support apparatus 2 for attachment to a surgical retractor comprising an articulating arm 3 having a plurality of segments 16, all having the same size and shape (page 5, line 11). Each segment has a convex outer wall in mating relationship to a concave inner surface 36 of an adjacent segment 38. A cable 30 extends through a passage formed in each segment. A manual device for variably tightening the cable is provided for causing the mating segments to be brought into tight frictional engagement (page 8, second paragraph). A tissue stabilization device 20 is removably attached to the arm and is lockable upon tightening of the cable. Carpenter discloses that the surfaces of the links may be coated with a friction inducing coating (page 5, line 32) but does not disclose that the segments are formed of a high stiffness material coated with a high friction plating material. Gannoe shows a segmented arm support apparatus wherein the segments are made of a high stiffness material coated with a high friction coating 222 (para. 0091) to reduce the tension in the cable required to lock the arm. It would have been obvious

to one of ordinary skill in the art at the time the invention was made to form the segments of Carpenter of a high stiffness material coated with a high friction coating, as taught by Gannoe, in order to reduce the amount of tension required in the cable to lock the arm in position. As to claim 16, the method for stabilizing is inherently carried out during the use of the device of Carpenter as modified by Gannoe. As to claims 11-13 and 20-22, the stabilization device of Carpenter is not removably attached to the arm by a movable socket slidable along a plunger attached to the end of the cable and wherein the socket is biased against the plunger by a spring. The stabilization device of Gannoe is removably attached to the arm by a movable socket 248 slidable along a plunger 266 attached to the end of the cable and wherein the socket is biased against the plunger by a spring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the attachment means of Carpenter with that shown by Gannoe, to permit the user to remove and replace the stabilization device easily.

Claims 6-8, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter et al (WO 01/50946) in view of Gannoe et al (2002/0077532) as applied to claims 1 and 16 above, and further in view of Leyden et al (6,371,345). While Gannoe discusses using a plating material have a different hardness than the material of the segments (paragraph 0091), he does not specify if the plating material is necessarily softer than the material forming the segments. Leyden utilizes a compressible coating on a ball member to increase frictional resistance between the mating surfaces. The coating reduces the force required to that must be applied to arrest relative movement between the mating surfaces (see column 3, lines

18-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coating on the segments of Carpenter as modified by Gannoe that is softer than the segment material, in view of Leyden, so that less force would be required to arrest relative motion of the segments. As to claims 7, 8, 18 and 19, Leyden discloses the use of an elastomer material for the friction increasing coating. Without a showing of criticality, the use of the other claimed materials as a coating material would have been obvious to one of ordinary skill in the art, dependent on the material of the segments and the desired tightening force.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed July 12, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, applicant argues that Gannoe teaches away from coating the segments with a high friction material that is softer than the segment material. The examiner holds that Gannoe teaches that the

frictional resistance between the segments should be enhanced by a secondary coating. Leyden teaches that the elastomeric coating between the ball and the ball contact surface enhances the frictional resistance and enables the joint to hold more weight than an uncoated joint. By adding a coating that is softer than the segment material to the joints of Ganoë would allow more force to be applied to the arm if necessary. Applicant further argues that the friction enhancing layer of Ganoë and the compressible coating of Leyden serve completely different purposes and solve different problems. While the examiner agrees that the devices of Ganoë and Leyden are different and the joint configuration is different, the problem solved is essentially the same: to increase the friction resistance between two joint elements, regardless of the relative motion (sliding or rotating) between the joint segments.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 703-308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo  
September 11, 2004